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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/649,097	08/28/2000	Hisashi Ishikura	Q60517	7802

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EXAMINER
NGUYEN, NAM V

ART UNIT	PAPER NUMBER
2635	

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/649,097	ISHIKURA ET AL.	
	Examiner	Art Unit	
	Nam V Nguyen	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 August 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

The application of Ishikura et al. for a "Vehicle key system" filed August 28, 2000 has been examined.

This application claims foreign priority based on the application 2000-78941 filed March 21, 2000 in Japan. Receipt is acknowledged of papers submitted under 35 U.S.C 119(a) – (d), which papers have been placed of record in the file.

Claims 1-19 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 ~~and 10 are~~ 15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, the phrase "for displaying kinds of the information " is confusing and unclear. It is not understood what is meant by such a limitation. What are the kinds of the information to be displayed?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-11 and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick (US# 6,140,939) and in view of Bonder et al. (US# 6,078,265).

Referring to claim 1, Flick discloses a vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result (column 2 lines 16 to 21; see Figure 3), said system comprising:

A transmitter (50) including a fingerprint information (i.e. biometric characteristic) capturing means (59) for capturing fingerprint information from a user's fingerprint (column 2 lines 42 to 48; column 5 lines 5 to 13), and a transmitting (57) means for transmitting the fingerprint information (fingerprint characteristic) captured by said fingerprint information capturing means (59) (column 8 line 26 to column 9 line 3; see Figure 5); and

A receiver (13) disposed in the vehicle (10) (i.e. vehicle remote start controller), including a receiving means (13) for receiving the fingerprint information transmitted from said transmitting means of said transmitter (50) (column 8 line 26 to column 9 line 3; see Figure 5), a verification means (82) for verifying the received fingerprint information against a list of pieces

of previously stored fingerprint information (column 8 line 19 to column 9 line 3; see Figure 5), and a control means (86) for controlling said pieces of equipment (30-37 and 41-46 see Figure 1) in the vehicle according to verification results from said verification means (column 9 lines 9 to 19). However, Flick did not explicitly disclose that transmitting means for transmitting a system-specific identifier and for verifying the received identifier against a previously stored identifier. Flick discloses that the transmitter transmits a uniquely coded transponder to the vehicle security systems to operate vehicle control system in prior art (column 2 lines 3 to 13).

In the same field of endeavor of fingerprint identification security system, Bonder et al. teach that transmitting means (44; see Figure 1) for transmitting a system-specific identifier (23) (i.e. user profile data or PIN) (column 4 lines 5 to 9; column 5 lines 19 to 49) and for verifying the received identifier against a previously stored identifier (44B) (column 6 lines 19 to 39; see Figure 4) in order to obtain the best transmission security strategy for transmitting the user profile data to the vehicle for verification.

One of ordinary skilled in the art recognizes the need to combine the user profile data of the key-lock operated security entry system of Bonder et al. with the biometric characteristic of Flick because Flick suggests it is desired to provide additional biometric characteristic sensor to read and learn a fingerprint would prevent thief of valuables from a vehicle (column 1 line 65 to column 2 lines 14) and Bonder et al. teach that transmitting a user profile data such as a PIN number and an individual's fingerprint of the key-lock security system in order to operate a vehicle device function (column 4 lines 5 to 9). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine the user profile data of the key-lock operated security entry system of Bonder et al. with the biometric

characteristic of Flick with the motivation for doing so would have been to provide a remote control keyless entry system that is more secure to deter vehicle theft, vandalism and to protect vehicle owner.

Referring to claim 2, Flick in view of Bonder et al. disclose a vehicle key system, to the extent as claimed with respect to claim 1 above and Bonder disclose further to include:

A transmission information selecting means (14) (i.e. an over-ride switch; see Figure 1) for selecting (i.e. disable or enable), as the information to be transmitted by said transmitting means, only the fingerprint information, only the system-specific identifier, and both of them (column 5 lines 9 to 18), according to a manipulation performed by the user (i.e. controlled and operated by an authorized user).

Referring to claim 4, Flick in view of Bonder et al. disclose a vehicle key system according to claim 2, Flick discloses wherein said transmission information selecting means (52a-52d) includes an operation means (column 5 lines 32 to 56; see Figure 2) that is manipulated by the user when selecting the information to be transmitted by said transmitting means (57) of said transmitter (50), and wherein said transmitter (50) further comprises a selection information holding means (56) (i.e. memory in the CPU) for holding selection information indicating the selected information (column 5 lines 57 to column 6 lines 2), and said receiver (10) further comprises a selection information holding means (14) (i.e. operation functions in the EEPROM) for holding selection information indicating the selected information (column 4 lines 47 to 52; column 9 lines 20 to 35).

Referring to claim 5, Flick in view of Bonder et al. disclose a vehicle key system according to claim 4, Flick discloses wherein said transmitter (50) includes said operation means (52a –52d) (column 5 lines 32 to 56; see Figure 2).

Referring to claim 6, Flick in view of Bonder et al. disclose a vehicle key system according to claim 4, Flick discloses wherein said receiver (10) includes said operation means (30-37 and 41-46) (column 5 lines 14 to 32; see Figure 1).

Referring to claim 7, Flick in view of Bonder et al. disclose a vehicle key system according to claim 4, Flick discloses wherein said transmitter (50) and said receiver (10) includes said operation means (30-37 and 41-46) (column 5 lines 14 to 56; see Figures 1 and 2).

Referring to claim 8, Flick in view of Bonder et al. disclose a vehicle key system according to claim 4, Flick discloses wherein an operation unit (30) intended for operating a piece of equipment disposed in said vehicle also serves as said operation means (30-37 and 41 to 46) (column 5 lines 14 to 32; see Figure 1).

Referring to claim 9, Flick in view of Bonder et al. disclose a vehicle key system according to claim 8, Flick discloses wherein said equipment (21) (i.e. the sensors of the vehicle) is a navigation device (i.e. movement of the vehicle) (column 1 lines 19 to 30).

Referring to claim 10, Flick in view of Bonder et al. disclose a vehicle key system according to claim 4, Flick discloses wherein a pedal (20) disposed in said vehicle also serves as said operation means (column 4 lines 53 to 60; see Figure 1).

Referring to claims 11 and 13-19, Flick in view of Bonder et al. disclose a vehicle key system according to claims 2 and 4-10, Bonder et al. discloses wherein if said verification means (42) (i.e. verification by the microprocessor; see Figure 4) (column 4 lines 17 to 22) previously stores no fingerprint information, when the received information includes the system-specification identifier (i.e. PIN) (i.e. when the fingerprint sensor is disabled by the authorized user) (column 5 lines 14 to 18), said verification means performs only the verification of the received identifier (i.e. PIN entered by the alphanumeric keyboard 23) against a previously stored identifier (44b) (i.e. user profile data) (column 5 lines 19 to 42; see Figure 4).

Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick (US# 6,140,939) and in view of Bonder et al. (US# 6,078,265) as applied to claim 2, and further view of Park (US# 5,990,803).

Referring to claim 3, Flick in view of Bonder et al. disclose a vehicle key system according to claim 2, and Flick in view of Bonder did not explicitly disclose wherein said transmitter includes a display means for displaying kinds of the information selected by said transmission information selecting means. Flick discloses a numeric or an alphanumeric display

(58) (column 5 lines 63 to 66; column 7 lines 6 to 17; see Figure 2) to indicate the functions of the operation of the remote control transmitter.

In the same field of endeavor of remote control system, Park teaches that transmitter (i.e. remote controller) includes a display means (150) (see Figure 1) for displaying kinds of the information selected by said transmission information selecting means (110) (column 1 lines 56 to 65; column 2 lines 31 to 53) in order to display the menu selection of the user.

One of ordinary skilled in the art recognizes the need to replace a numeric or an alphanumeric display of remote controller of Flick in view of Bonder with the selection menu display of Park because Flick suggest it is desired to provide a display to indicate the selection (column 7 lines 6 to 17) and Park teaches that the display to display the menu selection of the authorized user in order to avoid mistake of the function transmitted to the vehicle. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to replace a numeric or an alphanumeric display of remote controller of Flick in view of Bonder with the selection menu display of Park with the motivation for doing so would have been to provide more detail of the menu selection by the user.

Referring to claim 12, Flick in view of Bonder et al. disclose a vehicle key system according to claim 3, Bonder et al. discloses wherein if said verification means (42) (i.e. verification by the microprocessor; see Figure 4) (column 4 lines 17 to 22) previously stores no fingerprint information, when the received information includes the system-specification identifier (i.e. PIN) (i.e. when the fingerprint sensor is disabled by the authorized user) (column 5 lines 14 to 18), said verification means performs only the verification of the received identifier

(i.e. PIN entered by the alphanumeric keyboard 23) against a previously stored identifier (44b) (i.e. user profile data) (column 5 lines 19 to 42; see Figure 4).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bonneau, Jr. (US# 5,581,630) discloses a personal identification.

Borza (US# 5,867,802) discloses a biometrically secured control system for preventing the unauthorized use of a vehicle.

Hsu et al. (US# 6,041,410) disclose a personal identification fob.

Hsu et al. (US# 6,100,811) disclose a fingerprint actuation of customized vehicle features.

Vogele (US# 6,181,254) discloses a remote keyless entry system having passive transmission mode.

Plaschko et al. (US# 6,144,293) disclose a procedure for operating a security system.

Berstis (US# 6,198,996) discloses a method and apparatus for setting automotive performance tuned preferences set differently by a driver.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 703-305-3867. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nam Nguyen
January 13, 2003

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